Comment No. Word	EPA	Location	Text Highlighted	Comment	Response
General Comments					
1	1	N/A	N/A	Additional discussion of the Water Quality Monitoring Plan and Perimeter Air Monitoring Plan, as well as what mitigation/correction measures will be taken in case of an exceedance of an action level or a significant weather event, is needed. These discussions will likely result in additional comments on the design and the need for additional modification.	A Water Quality Monitoring Plan has been developed based on comments received March 29 on the Draft Final Design and conversations with the USEPA on April 2. The draft plan has been provided to the USEPA/NJDEP for review/comments.

Comment No.					
Word	EPA	Location	Text Highlighted	Comment	Response
2	2	N/A	N/A	Please provide more information (concentration data, if available) to show that dredging of the steeper slopes without cap placement is protective.	The characterization data indicate that the post-dredge elevations of the uncapped area upriver of Station 32+00 is to native sediment that has been undisturbed and does not have elevated concentrations of COPCs. As shown in the table below, concentrations of 2,3,7,8-TCDD, for example, dramatically decrease with depth approaching the native sediments. Since dredging will be performed to native sediment, and the data indicate that the native sediment does not have elevated dioxin concentrations, the contaminated sediment will be effectively removed in this region. The text has been revised to include a discussion and summary table (Table 3-2) of this data plus mercury and PCBs.

Location	Depth Interval	2,3,7,8-TCDD (pg/g)
12E-0365	0–0.5 ft	29,000
12E-0365	0.5–1.5 ft	31,000
12E-0365	1.5–2.5 ft	4,030
12E-0365	2.5–3.5 ft	3,280
12E-0365	3.5–4.68 ft	18.2
12E-0365	4.68–6.1 ft	2.86
12E-0366	0–0.5 ft	26,600
12E-0366	0.5–1.5 ft	16,500
12E-0366	1.5–2.2 ft	9,170 (above native sediment)
12E-0367	0–0.5 ft	203
12E-0368	0–0.5 ft	1,070
12E-0368	0.5–1.5 ft	714
12E-0368	1.5–2.2 ft	2.36
12E-0369	0–0.5 ft	7,390
12E-0369	0.5–1.5 ft	1,110
12E-0369	1.5–2.75 ft	3.92
12A-0481	0–0.5 ft	23,200
12A-0481	0.5–1.5 ft	35,600
12A-0481	1.5–2.5 ft	67.8

Comment No. Word	EPA	Location	Text Highlighted	Comment	Response
3	3	N/A	N/A	Please provide more detail for the sediment transfer area, particularly on how spillage and cross contamination will be avoided.	Upon arrival at the Clean Earth DMPF, each loaded work scow will be moored securely against the North Dock of the DMPF facility using a series of winches and cables. Spill protection (a spill plate), which reaches between the work barge and the offloading platform and is a permanent part of the process system, will be deployed under the excavator bucket and tilted toward the barge so that any material spilled during offloading will flow back into the barge. The spill plate will be scraped and washed routinely to prevent buildup of material. This additional information has been provided in the document.
4	4	N/A	N/A	The introductory language in all appendices should generally match/be similar to the language used in the main document.	The document has been revised accordingly.
Specific Comments					
5	5	Page 1-1	updated	Typo: 3rd paragraph, 2nd sentence – updated should be updates.	The text has been revised accordingly.
6	6	Page 3-2,Section 3.3	Seepage velocity has been estimated to be on the order of 250 to 500 cm/year.	Please provide a reference/basis for the statement "Seepage velocity has been estimated to be on the order of 250 to 500 cm/year."	Seepage velocity will be based on actual field measurements, and the text has been revised accordingly.
7	7	Section 3.5	Hydrodynamics	a. It is unclear what flows were simulated. For example Hurricane Irene is cited as 25,000 cfs in one location and 20,800 cfs in another. This may be Little Falls vs the upstream boundary of the high resolution model, but it is not clear. The same is true for the other flows simulated.	Hurricane Irene flow at Little Falls was 20,800 cfs, while at Dundee Dam it was close to 25,000 cfs. This is the same simulation. In addition, this was a simulation of Hurricane Irene using the discharge at Dundee Dam as it happened, together with the water levels and tides simulated from the USEPA LPR/Newark Bay (NB) model at RM 10.1; the Irene simulation reproduced the storm as it happened. The return period is based on Little Falls discharge; therefore the 20,800 cfs corresponds roughly to an 80-year return period, as indicated in the table below. The extreme value analysis was done only for the discharge at Little Falls since record at Dundee Dam is too short.

Comment No. Word	EPA	Location	Text Highlighted	Comment	Response

Recurrence Interval (Yrs)	Discharge at Little Falls (cfs)
2	7,100
5	10,500
10	13,000
25	16,000
50	19,000
100	22,000
200	25,000
500	29,000

HydroQual (2006 Final Modeling Work Plan, Lower Passaic River Restoration Project, Mahwah, NJ) applied a drainage-area proration to calculate discharge at Dundee Dam from the values at Little Falls. Using that proration gives approximately 25,000 cfs at Dundee Dam for the 100-year value at Little Falls, and 32,000 cfs at Dundee Dam for the 500-year storm at Little Falls.

b. There appears to be an inconsistency between the shear stresses computed and flows. If Irene has a flow less than the 1 in 100 year flood, why does it have a higher shear stress? Were different tidal conditions used? A figure(s) showing the upstream and downstream boundary conditions would be helpful. A table with the Dundee Dam flow, maximum velocity, and maximum shear stress might also be helpful.

The 1-in-a-100-years storm was simulated using a prorated discharge at Dundee Dam from the 100-year storm at Little Falls (22,000 cfs). The prorated value at Dundee Dam corresponding to 22,000 cfs at Little Falls was around 24,000 cfs.

This simulation was done as a "synthetic event" as we refer to in the text. This simulation uses the discharge at Dundee Dam calculated from the discharge at Little Falls for the whole length of the simulation, while the downstream boundary varies from spring to neap conditions. Therefore, the synthetic simulation and the Irene simulation were different, and more importantly, the discharge at Dundee Dam for the Irene simulation was larger than that for the 100-year Restoration Project simulation, because of the relation used to calculate discharge in Dundee Dam from discharge at Little Falls. It is recognized that the formula that relates the discharge at both locations is far from perfect, but it is the one used by USEPA for their model boundaries and the one we have applied as well.

Comment No. Word	EPA	Location	Text Highlighted	Comment	Response
8	8	Page 4-1, Section 4.2.1	Sediment	The wording of this section is confusing. The report indicates that removal to the 2 feet target depth equates to approx. 20,000 CY. In the area north of station 32+00, the area will be dredged to native material, which will result in an additional 1,000 CY. Please clarify if there is an additional 1,000 CY of sediment to be dredged.	Per the volume calculation provided in Appendix B, the total dredge volume including the 4-inch over-dredge tolerance is 19,449 yd^3, which was rounded up to "approximately 20,000 yd^3" in the design report. The volume was estimated using the existing bathymetric surface and the post-dredge bathymetric surface, which assumes no dredging within 50 ft of the United Water pipeline and dredging to native sediment upriver of Station 32+00. The text has been revised to eliminate any confusion.
9	9	Page 4-1, Section 4.2.2	Debris	The following statement was not included in the design specification<, "The riprap associated with the Township of Lynhurst's pump station will not be disturbed." Recommend to include this in the design specification.	The technical specification has been revised accordingly.
10	10	Page 4-2, Section 4.2.3	Slope Stability	Is the information provided in this section intended to (i) suggest that a criteria of less than 3H:1V can be used or (ii) that the 3H:1V criteria will be used, but should be conservative, or is the assumption that the dredging contractor will propose what slope they think is appropriate? Please clarify.	Given the relatively shallow depth of the dredging operations (2 ft), dredging will be conducted with box cuts, and no sloping will be performed. Therefore, should the dredge surface fail, it is assumed to be at the angle of repose (3H:1V). The design drawings assume that the perimeter face of the removal area will fail at a 3H:1V slope. The final dredge surface must meet the acceptance criteria of the technical specification. Any areas along the perimeter where the final elevation does not meet this criterion due to material sloughing will need to be removed before capping. The text has been revised accordingly.
11	11	Page 4-2, Section 4.2.4	Utilities	a. Please review/provide additional documentation from United Water (and PVSC?) on details of the pipelines, including how deep they are and the dredging set back requirements. The 50' set back seems excessive. Proper means and methods employed by the contractor may allow excavation over the pipeline to within 1 vertical foot (alternative dredging methods may be able to be utilized to allow for completion of dredging and capping operations provided the depth of cover to the top of the pipeline is sufficient (for example, 42" or greater)). We agree that spuds should be kept a minimum distance away from the pipeline horizontally (for example, 10 feet), but again think 50 feet is excessive. Please clarify if these means were proposed to reduce the 50' set back. In any case, the pipeline should be reliably located prior to the initiation of dredging and protected from incidental damage.	The owner of the water line in question (United Water) was contacted and the scope for the project explained to them. Given that the pipeline is the main water supply to Jersey City, NJ they elected to take a conservative approach (50 ft offset). The comment also assumes that the "as-builts" for the pipeline are accurate to within 1 ft, which is likely not the case. Following further discussion on May 1, 2013, the utility has agreed in writing to reduce the offset to 30 feet provided sonar surveying is conducted to accurately locate the two water lines. The design will be revised after the survey is complete.
				b. The text is unclear – is there a 3rd pipeline owned by PVSC within the removal area? If so, please add this information to this section, to the figure, and to the design specification.	The PVSC pipeline line is not located within the Removal Area but is located approximately 75 feet upriver of the Removal Area. The text and drawing have been revised to make this point clearer.

Comment No. Word	EPA	Location	Text Highlighted	Comment	Response
				c. Recommend including the following statement in the design specification "The wire cable crossing the Removal Area does not appear to be associated with a utility or specific use and will be removed by the contractor within the approximate dredging footprint unless determined otherwise by CH2M HILL through additional discussions with the local municipalities."	The drawings have been revised to include the recommended text.
				d. Typo: First line, indentified should be identified.	The text has been revised accordingly.
12	12	Page 4-5, Section 4.3.4	Excess water from dredging will be contained during barge transport and removed at the off-loading facility for subsequent handling and treatment prior to discharge.	Please change "discharge" to "disposal" in the following statement, "Excess water from dredging will be contained during barge transport and removed at the off-loading facility for subsequent handling and treatment prior to discharge." The water will not be discharged; it will be disposed of at an EPA-approved off-site facility.	The text has been revised accordingly.
13	13	Page 4-7	The RM 10.9 Removal Actions	Typo: In the third line of the first full paragraph, in the phrase "10.9 Removal Actions" action should be singular.	The text has been revised accordingly.
14	14	Page 4-11, Section 4.6.1	Water Quality	Please specify the depths of probe and grab samples for each buoy location.	The text has been revised accordingly.
15	15	Page 4-11, Section 4.6.1.1	Turbidity buoy #2: approximately 1,000 ft (300 m) upstream of the dredging operations at the edge of the dredging area of influence Turbidity buoy #3: approximately 1,000 ft (300 m) downstream of the dredging operations at the edge of the dredging area of influence	Buoy #2 and #3 should be closer to the dredge area, no more than 200' from limits of dredging. Please provide justification for the proposed locations approximately 1,000' from the dredging operations. The text states that these are located "at the edge of the dredging area of interest," but this statement is not supported.	The near-field monitoring points have been revised to be no less than 200 ft from the upstream and downstream perimeter of the Removal Area. These distances may be re-evaluated dependent on the trigger and action levels established for the project (see response to Comment No. 17, below).
16	16	Page 4-11, Section 4.6.1.1	During this month of baseline monitoring TSS samples will be collected at the four buoy locations daily to verify the turbidity–TSS relationship so that the real-time turbidity monitors can be the initial resuspension indicator.	Last paragraph, second sentence – this statement indicates that TSS samples will be collected at the four buoy locations daily during the baseline monitoring. However, other parts of the report indicate samples will be collected from only two locations. Please clarify and make consistent.	TSS samples will be collected at all four buoy locations during the baseline monitoring period as well as during the dredging/capping operations. During baseline monitoring, TSS samples will be collected once daily; during the initial 48 hours of dredging, TSS samples will be collected every 4 hours and then daily during dredging. The text has been revised to clarify this point.
17	17	Page 4-12, Section 4.6.1.3	Resuspension Monitoring	This section discusses trigger level and action level of 35 NTU and 70 NTU, respectively. However, Section 4.6.1 indicates NJDEP requirements would be 15 NTU for 30-day average and 50 NTU for a one time maximum. Please explain how the specified trigger level and action level comply with the NJDEP requirements.	The current river quality does not meet the NJDEP requirements. Therefore the trigger and action level will be required to be set at some agreed value above ambient conditions. The text has been revised to provide a rationale for these levels.

Comment No. Word	EPA	Location	Text Highlighted	Comment	Response
18	19	Page 4-13, Table 4-6	Mobile point 300 ft down current of dredging operations	Buoy # 5 should be within 50' of downstream silt curtain extent and no greater than 100' downstream from active dredge operations. Please provide justification for the proposed location 300' from the dredging operations. Also, please provide a bit more detail on the logistics of how the location of this mobile buoy will be determined and how it will be placed.	The location of Buoy #5 has been revised to be a close as practicable to the silt curtain system surrounding the immediate dredging/capping operations. Buoy #5 is not a compliance point, but rather an operational controls point to help the dredging contractor evaluate resuspension conditions.
19	18	Page 4-13, Section 4.6.1.4	The spill kits	It seems the spill kits specified is more appropriate for land base operations. Please verify the appropriateness of the specified spill kits for a dredging operation.	The spill kit items have been reviewed and revised accordingly to be more appropriate for marine use.
20	20	Page 4-14, Section 4.6.2.2	Removal Areas in the river or bay	The text refers to the "Removal Areas in the river or bay." There is one removal area, and the bay should not be referenced.	The text has been revised accordingly.
21	21	Page 4-14, Section 4.6.3	Noise	The noise restrictions should also be added to the Contract Documents/Specifications. Please clarify and revise as necessary.	Noise restrictions have been added to the technical specifications.
22	22	Page 6-3, Section 6.2.4	in a pug mill or in-barge mixing system	Earlier in Section 6, it is stated that the material will be stabilized in a pug mill. This subsection states that an in-barge mixing system could be used. Please clarify.	At the time of submittal (Feb. 27), the stabilization subcontractor was not known. Therefore, the design needed to consider both pug mill and in-barge mixing. As the subcontractor has now been selected, the text has been revised accordingly to reflect the use of the pug mill.
23	23	Page 7-1, Section 7.1	The chemically active layer will prevent the breakthrough of 2,3,7,8-TCDD, PCBs, and mercury for at least 250 years.	The statement "The chemically active layer will prevent the breakthrough of 2,3,7,8-TCDD, PCBs, and mercury for at least 250 years." should be discussed. What happens in year 251? Please clarify and revise, as necessary.	Timeframes on the order of 100 years are typically used in the long-term evaluation of chemical transport through a sediment cap. Pore water concentrations over the timeframe are estimated by the model, and potential chemical breakthrough is assessed by comparing pore water concentrations just above the active layer of the cap to the project's evaluation criterion. Analytical quantitation limits were used for the evaluation criterion. The absence of chemical breakthrough indicates that pore water concentrations are below applicable project quantitation limits for the given timeframe. Typical breakthrough curves for the proposed cap do not abruptly increase at any point in time; rather, the advective and diffusive forces create a gradual increase in pore water concentrations over decades. At the same time, natural processes within the cap and underlying sediments will also act to offset (i.e., decrease) pore water concentrations over time. The long-term pore water concentration estimates are conservative in that they do not account for these reductions in chemical concentration.
24	24	Page 7-5, Section 7.1.4.1	Cap Performance Model	Please provide Cap Design models in electronic format for EPA review.	The input and output files for the CapSim model will be provided.
25	25	Page 7-8, Table 7-4	Material	Please provide area, depth and bulk density for each material (except geotextile).	It is assumed that the comment is referring to Table 7-5. The area and bulk density of the materials have been provided, except for the active layer, which has not been finalized yet.

Comment No. Word	EPA	Location	Text Highlighted	Comment	Response
26	26	Page 7-9, Section 7.5.2	Armor Type B 4.5 12	The minimum thickness of 4.5 inches for the type B armor seems low when the minimum average thickness is 12 inches. Please provide justifications for such a large tolerance level and its adequacy of protection of the cap. Note this comment also affects the design specification (Spec 02 32 00, section 3.01C, item e).	The minimum thickness of 4.5 inches is the design thickness, which is protective for erosional forces. The minimum average thickness was increased from 4.5 inches to 12 inches to account for any shoreline impacts from ice formation. To simplify cap placement, the Type B armor has been eliminated, and the entire cap will be armored with Type A armor, which is 12 inches thick.
27	27	Page 7-10, Section 7.5.4	Placement Sequence	This section mentions that the sediment remaining beneath the removal area has similar concentrations of COPCs to that being removed. However, how do its physical properties compare? Please add a sentence or two on this topic.	The physical properties of the sediment greater than 2.5 ft below the surface are provided in Table 3-3. These properties do not vary significantly from those found 0 to 2.5 ft below the surface. The text has been revised to indicate as such.
28	28	Section 8	Overland Transportation and Offsite Disposal	This section discusses both rail and truck transport, though the CHASP discusses rail transport only. Please clarify/make consistent.	The stabilized material will be transported by truck to the rail transfer station, where the containers will be transferred to rail cars for final transport to the disposal facility. The documents have been reviewed for consistency and revised accordingly.
29	29	Appendix B, Various	Appendix B	Several of the cores had very low recoveries (e.g. 0.5' logged vs. penetration of 13 ft for core 11B-0318-C2). Please include a discussion of the impact of these low recovery cores relative to the overall geotechnical objectives and implications for the cap design. Please clarify if this is discussed elsewhere in the report and/or considered in the design safety factor(s).	The cores in question were collected only in order to sample the top 6 inches of sediment, so there is not a problem with core recovery. Core 11B-00318-C1 was the primary core and C2 was the sample of the top 6 inches at location 0318.
30	30	Appendix B	Appendix B Geotechnical Data	Several of the cores list slight to moderate HC odor, a few list a strong HC odor near the surface, and some list a sulfur/rotten egg odor in the top 6 inches. This is contrary to what is stated in the design and CHASP, and what has been stated publicly. Please address.	The design and CHASP are based on objective analytical data collected during the sampling effort.
31	31	Appendix C, PDF pages 61 and 63 of 68	Appendix C	The Darcy velocity of 1000 cm/yr is stated to be conservative. Please provide the basis for this statement. Please indicate what hydraulic conductivity and gradient were used to calculate this.	"Conservative" has been deleted from the text. The Darcy velocity or seepage velocity has been measured directly.
32	32	Appendix C, PDF pages 61 through 68 of 68	Appendix C	Please provide complete Reible spreadsheet electronically to EPA for review of assumptions used.	CapSim modeling software was used for the cap design simulation. The inputs and outputs for the model will be provided.
33	33	Appendix D, Drawing C-11,12 Sheet 13-14 of 27	Appendix D	Drawing C-11,12 ; Sheet 13-14 of 27—Please locate the watermain on applicable cross-sections and indicate Contractor to verify location, protect, and construct project without disturbing or damaging watermain. Suggest changing "No Dredge" to "Caution". Please revise as necessary.	The cross-section sheets have been revised to show the approximate location of the water main based on the 1930 as-builts provided by the utility owner. A note will be added as suggested. The interpretation of "Caution" can be subjective. The designated area should remain a "No Dredge Zone" so that there is no misunderstanding as to how this area is to be managed.

Comment No.

Word	EPA	Location	Text Highlighted	Comment	Response
34	34	Appendix D, Drawing C-4 Sheet 6 of 27	Appendix D	Drawing C-4 Sheet 6 of 27—The 72" water main is shown 40' wide plus 50' offset. Means and methods can be specified such that the dredge contractor can locate and protect the water main to allow the execution of the work. The proposed offset is too large and impacts the overall effectiveness of the proposed remedy. The area identified exceeds 10% of the removal area boundary. Please clarify and revise, as necessary.	There are two pipelines in the "No Dredge Zone" which are spaced 40 feet apart. See response to Comment #11a.
35	35	Appendix D, Drawings C22,23,24 Sheet 24,25,26 of 27	Appendix D	Drawings C22, 23, 24 Sheet 24, 25, 26 of 27—Please provide units for Max Horizontal and Max Vertical in tables (assumed to be feet). Sheet C-22 only – Please clarify if missing data be collected or is it assumed that these bridges will not impact the dredging contractor's vessels. Revise as necessary.	Units are in feet and the drawings have been revised accordingly. Data were not provided for bridges above RM 10.9 as the information is not relevant. The missing data for the DeJessa Avenue Bridge and Rutgers (Rte. 7) Bridge have been provided.
36	36	Appendix E, General	Appendix E	Please provide a TOC for this Appendix.	A TOC has been provided for Appendix E.
37	37	Appendix E, Section 01 11 03, page 2 of 2	Appendix E	Section 01 11 03, page 2 of 2—Four engineering design packages are specified. Please provide table of contents or cross-reference document indicating which specifications and drawings will be used in each design package.	Only two engineering packages were used for procurement: (1) Dredging/Stabilization/Capping (D/S/C) and (2) Transportation and Disposal. The technical specifications and design drawings were used only for the D/S/C Request for Proposal. The text has been revised to indicate that only two engineering packages were developed for procurement purposes.
38	38	Appendix E, Section 01 22 001, page 1 of 7	Appendix E	Section 01 22 001, page 1 of 7—In Item 1.02, the submittal contact/address is not specified. Please clarify and revise, as necessary.	The text has been revised accordingly.
39	39	Appendix E, Section 01 45 16, page 6 of 7	Appendix E	Section 01 45 16, page 6 of 7—The distances listed for Bouys #3, 4, 5 are too far from the active dredging areas. Consider reducing by a factor of 5. Please clarify and revise, as necessary.	The technical specification has been revised accordingly. See responses to Comments #15 and #19.
40	40	Appendix E, Section 01 45 16, page 6 of 7	Appendix E	Appendix E, Section 01 45 16, page 6 of 7—Assume TSS is estimated based on Turbidity. Please designate measured vs. calculated parameters. Clarify and revise, as necessary.	Dredging and capping operations will be monitored using real time turbidity results. TSS will be estimated based on these real time values. However, grab samples will also be collected to calculate the TSS value. The text has been revised accordingly.
41	41	Appendix E, Section 01 45 16, page 6 of 7	Appendix E	Section 01 45 16, page 6 of 7—Please specify the depth of measurement(s) at each buoy. Revise as necessary.	As indicated in Paragraph 3.01A, the measurements will be made at the midpoint depth at each buoy location. The text has been revised to indicate that the midpoint depth will be determined at low-tide conditions.
42	42	Appendix E, Section 01 45 16, page 6 of 7	Appendix E	Section 01 45 16, page 6 of 7—A daily upload of logged data to EPA/NJDEP on an accessible internet site should be considered/provided. Please clarify and revise, as necessary.	The data will be made available to the USEPA/NJDEP on a daily basis. The management of these data will be outlined in the WQMP.
43	43	Appendix E, Section 01 45 16, page 7 of 7	Appendix E	Section 01 45 16, page 7 of 7—Please provide a discussion on the determination of "reportable event" criteria to be discussed with EPA and defined as agreed to.	A discussion has been provided in the WQMP.

Comment No.					
Word	EPA	Location	Text Highlighted	Comment	Response
44	44	Appendix E, Section 01 91 14, page 1 of 9	Appendix E	Section 01 91 14, page 1 of 9—In Item 1.01, please verify the statement "trucks provided by others" for disposing PDM is still true. Revise as necessary.	Trucks are to be provided by the T&D subcontractor for the transport of the intermodal lined containers to the rail transfer station.
45	45	Appendix E, Section 01 91 14, page 8 of 9	Appendix E	Section 01 91 14, page 8 of 9—Times for E and F should be the same, or other provisions made for final street sweeping. Please clarify and revise, as necessary.	The technical specification has been revised accordingly.
46	46	Appendix E, Section 02 32 00	Appendix E	Section 02 32 00—All borrow source material used for cap (sand, gravel, and soil if used) must be tested by the contractor prior to use and determined to be environmentally clean, in accordance with N.J.A.C. 7:26E. A letter from the borrow source facility showing prior testing results is not sufficient; project-specific samples must be collected and analyzed for the full TCL/TAL/metal suite. EPA approval is needed prior to use. In addition, all borrow sources must be visited and visually inspected for the presence of debris. Only clean sources may be utilized.	The technical specification has been revised accordingly.
47	47	Appendix E, Section 02 32 00, page 7 of 9	Appendix E	Section 02 32 00, page 7 of 9 —In Item 301C(1)(e), the minimum thickness of 4.5 inches for the type B armor seems low when the minimum average thickness is 12 inches. Please provide justifications for such a large tolerance level and its adequacy of protection of the cap.	The minimum thickness of 4.5 inches is the design thickness, which is protective for erosional forces. The minimum average thickness was increased from 4.5 inches to 12 inches to account for any shoreline impacts from ice formation. To simplify cap placement, the Type B armor has been eliminated, and the entire cap will be armored with Type A armor, which is 12 inches thick.
48	48	Appendix E, Section 31 23 24, page 2 of 20	Appendix E	Section 31 23 24, page 2 of 20—Are there any noise limitations or hours of operation limitations that the contractor needs to be aware of? Please clarify and revise, as necessary.	Dredging operations are limited to daylight hours in order to minimize the potential impact to the surrounding community. The noise limitations have been included in the text.
49	49	Appendix E, Section 31 23 24, page 3 of 20	Appendix E	Section 31 23 24, page 3 of 20—Suggest naming the US Coast Guard as a regulator in Para. 1.05 A. Please revise as necessary.	The text has been revised accordingly.
50	50	Appendix E, Section 31 23 24, page 12 of 20	Appendix E	Section 31 23 24, page 12 of 20—The minimum production rate provided is lower than the rate used for the schedule estimate. Please clarify and revise, as necessary.	The schedule will be revised to reflect the subcontractor's project schedule, which meets the minimum production rate of 450 yd^3/day.
51	51	Appendix G	Appendix G	In general, this appendix needs to be proofread. We found several typos and inconsistencies. For example, the phrase Removal Action is not consistently capitalized (or not capitalized) throughout the appendix, the term "remedial action" is used at least once instead of "removal action," and on page 1-2 the word "water" is missing after "surface" in the baseline monitoring bullet at the bottom of the page.	The document has been reviewed and revised accordingly.

Comment No.					
Word	EPA	Location	Text Highlighted	Comment	Response
52	52	Appendix G, Page 1-2	Appendix G	Page 1-2—The very bottom of the page states that barge movement times would be limited to minimize the impact of bridge openings. We thought the goal was to move barges twice a day, at low tide, to avoid the need to open bridges, and that they would only need to be opened during mobilization and demobilization. Please clarify. Section 1.2.1.2 also suggests the need to open bridges.	While the goal was to avoid opening bridges, all the subcontractors that submitted proposals required the opening of bridges in order to perform the work. These openings will be limited to hours when impact to surface traffic will be minimal.
53	53	Appendix G, Page 1-6	Appendix G	Page 1-6—The first paragraph on the page after the bullets states that both EPA's and the CPG's GC on-site project managers will be responsible to make sure that BMPs are being followed. Please re-word to state that the CPG's GC is responsible for this, with EPA oversight.	The text has been revised accordingly.
54	54	Appendix G, Page 3-4	Appendix G	Page 3-4—The text states that security will be provided to secure the removal area and adjacent land. What is meant by including adjacent land here?	"Adjacent land" refers to Riverside Park.
55	55	Appendix G, Section 4.7	Appendix G	Section 4.7—What mitigation measures and BMPs will be used if an air monitoring threshold is exceeded, particularly for VOCs, HS, and odor? Please either add this information here or reference where it can be found in the document. For example, what if the source of the exceedance is an area at the bottom of the dredged removal area that will remain exposed until cap placement?	The Community Air Monitoring Plan will include the trigger values and mitigation measures to be undertaken should these trigger values be exceeded.
56	56	Appendix G, Section 4.7.4	Appendix G	Section 4.7.4—The text states that barges full of dredge sediment will only be stationary for less than an hour. Does this mean once they start the trip to the stabilization facility? It seems they would have to be stationary for longer than an hour, at least at the Removal Area, to wait for the right tidal conditions.	As bridges will be opened, the barge movements are not restricted by the tidal conditions. The stationary timeframe of less than an hour refers to once the barges start the trip downstream to the stabilization facility. The barge(s) will be staged at the Removal Area while being loaded until they begin transport to the stabilization facility.
57	57	Appendix G, Section 4.8	Appendix G	Section 4.8—Please state here where in the design the mitigation measures that will be taken in the case of a weather event can be found, and summarize them here. In particular, what mitigation measures will be taken to protect the already-dredged areas if a large storm event occurs during dredging?	The document has been revised to include a discussion on potential mitigation measures that will be taken in the case of a weather event.
58	58	Appendix I, Section 4.3	Appendix I	Section 4.3—Just to be clear, EPA should be invited to all regular (weekly?) progress, safety, and QC meetings. They are an active part of the project team. In addition, EPA should be notified immediately if something significant/out of the ordinary happens.	The USEPA will be invited to all regular project meetings, and onsite personnel will be notified immediately should an incident occur.
59	59	Appendix J, General	Appendix J	General—Please clarify if schedule should be updated to reflect actual task completion dates and percent complete of ongoing tasks. Revise as necessary.	A baseline schedule for the project has been developed and is updated weekly to reflect actual task completion since the Draft Final Design was submitted, on February 27. It is anticipated that the USEPA will receive the updated schedule on a weekly basis going forward.

Comment No.					
Word	**EPA**	**Location**	**Text Highlighted**	**Comment**	**Response**
60	60	Appendix J, Page 1 of 4 schedule, Items 205, 235	Appendix J	Page 1 of 4 schedule, Items 205, 235—Please specify when the water quality monitoring plan will be submitted and the long term monitoring and maintenance plan meeting occur. Please revise the dates for these items in the schedule.	A draft WQMP was provided to USEPA/NJDEP on April 19, 2013. The Long Term Maintenance and Monitoring Plan (LTMMP) is currently being prepared. A revised schedule for the submittal of these plans will be provided.
61	61	Appendix J, Page 1 of 4 schedule, Items 275, 315	Appendix J	Page 1 of 4 schedule, Items 275, 315—The contractor procurement appears to precede the final design approval by EPA. Please clarify how changes to the design will be incorporated into contractor's scope of work. Revise as necessary.	In order to meet the USEPA's target date of July 1, it was necessary to begin the procurement process prior to USEPA approval of the final design. The tender packages were prepared to minimize potential cost impacts due to changes in the design (i.e., final cap configuration). Changes in the design that are not addressed will be handled through the change order process for the project.
62	62	Appendix J, Page 3 of 4 schedule, Item 850	Appendix J	Page 3 of 4 schedule, Item 850—The Qty/Production Rate indicates 43 working days. The schedule seems light for this task, even with anticipated delays, may exceed estimate. Please clarify how much float time is anticipated for this task. Please clarify and revise, as necessary.	The selected subcontractor has provided a schedule that will meet the dredging schedule provided and includes 10 days of float.